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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,445	11/28/2001	John Border	0361913-01006	2403
29158	7590	04/14/2011	EXAMINER	
K&L Gates LLP P.O. BOX 1135 CHICAGO, IL 60690			STRANGE, AARON N	
			ART UNIT	PAPER NUMBER
			2448	
			NOTIFICATION DATE	DELIVERY MODE
			04/14/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/996,445	BORDER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	AARON STRANGE	2448	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/15/2010 (Appeal No. 2009-006836).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,8,10-12,15,17-19,22,24-26,29,31-36 and 38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5,8,10-12,29 and 31 is/are allowed.
- 6) ☒ Claim(s) 15,17-19,22,24-26,32-36 and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. In view of the BPAI decision (Appeal 2009-006836) mailed on 12/15/2010, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

The Technology Center Director has approved of reopening prosecution by signing below.

### ***Allowable Subject Matter***

2. The BPAI decision mailed 12/15/2010 (Appeal No. 2009-006836) reversed the Examiner's rejection of claims 1, 3-5, 8, 10-12, 15, 17-19, 22, 24-26, 29, 31-36 and 38 under 35 U.S.C. §112, first paragraph.

Since the Examiner is bound by this decision, and the prior art of record fails to teach the claims as understood by the Examiner (See the discussion below in the section titled "Claim construction of independent claims 1, 8, 15 and 22"), claims 1, 3-5, 8, 10-12, 29 and 31 are allowed.

Claims 35, 26 and 38, which are broader than the remaining claims since they do not require consideration of both a time to live and whether an object is uncacheable, are rejected in view of the newly discovered reference(s) to Patel (US 2003/0051100). Rejections based on the newly cited reference appear below.

3. Claims 15, 17-19 and 32-34 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

4. Claims 22 and 24-26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 22 and 24-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. Claim 22 is directed to a "computer-readable storage medium", a term not explicitly defined by the specification. The specification describes the similar term "computer-readable media" to include "transmission media", such as acoustic or light waves (§71) as well as "a carrier wave" (§72). Therefore, the broadest reasonable interpretation of claims 22 covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable medium and the disclosure of the specification. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35

U.S.C. §101 as covering non-statutory subject matter. *See In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter).

The Examiner recommends amending claim 22 to add the limitation "non-transitory" to the preamble to overcome the above rejection.

8. All claims not individually rejected are rejected by virtue of their dependency from the above claims and their failure to correct the above noted deficiencies.

### ***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 15, 17-19 and 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Regarding claim 15, the claim elements "means for receiving", "means for determining", "means for including", and "means for forwarding", are each means (or step) plus function limitations that invoke 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for each of the claimed functions.

The specification describes each of the functions performed by these means as being performed by an “upstream server” (See e.g., ¶¶36-41) which is a general purpose computer executing instructions stored in a memory (¶¶68-70).

Therefore, the specification discloses only a “general purpose computer” (the “upstream server”) executing unspecified “instructions”, without including a description of the algorithm that transforms the general purpose computer into a special purpose computer programmed to perform each of the claimed functions.

Applicant must disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the disclosed algorithm that performs the claimed function. See *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1338 (Fed. Cir. 2008). Applicant may express the algorithm in any understandable terms including a mathematical formula, in prose, in a flow chart, or in any other manner that provides sufficient structure. See *Finisar Corp. v. The DIRECTV Group Inc.*, 523 F.3d 1323, 1340 (Fed Cir. 2008).

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function (i.e., the algorithm that the general purpose computer executes to perform the claimed functions) without introducing any new matter (35 U.S.C. 132(a)) or relying on documents incorporated by reference.

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function (i.e., the algorithm that the general purpose computer executes to perform the claimed functions) and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function (i.e., identify the algorithm that the general purpose computer executes to perform the claimed functions). For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

12. Regarding claim 32, the claim element “means for forwarding” is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for each of the claimed functions, and is rejected under the same rationale presented for claim 15.

13. Regarding claim 33, the claim element “means for determining” is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for each of the claimed functions, and is rejected under the same rationale presented for claim 15.

14. All claims not individually rejected are rejected by virtue of their dependency from the above claims.

***Claim construction of independent claims 1, 8, 15 and 22***

15. Independent claims 1, 8, 15 and 22 each contain the limitation “forward the object based on a predetermined criteria relating to the object, including the time-to-live of the object and the object being marked as uncacheable” or a substantial equivalent.

The proper interpretation of this limitation has been a matter of dispute between Applicant and the Examiner (See e.g., Examiner Ans. of 6/25/2008, p. 6; Appeal Br. of 4/16/2008, pp. 8-9). The BPAI decision (Appeal 2009-006836) did not directly address the proper interpretation of these claims, but reversed the Examiner’s rejection on the separate grounds that “the ‘time-to-live’ indicator and the ‘uncacheable’ indicator are not mutually exclusive” (Appeal 2009-006836, p. 5).

The BPAI’s decision appears to accept the Examiner’s proffered construction, since a finding that the two criteria are not mutually exclusive is only relevant in the situation where both criteria are considered simultaneously. Therefore, the above cited



limitation has been interpreted to mean that both "the time-to-live of the object" and "the object being marked as uncacheable" are required criteria upon which the forwarding decision is based, such that forwarded objects must be marked uncacheable and the forwarding decision must have been based upon a time-to-live of the object.

16. If Applicant intends for these criteria to be mere examples of acceptable criteria or a set of criteria from which one or more may be considered in a forwarding decision, the Examiner recommends amending the claims to recite "forward the object based on a predetermined criteria relating to the object, including the time-to-live of the object or the object being marked as uncacheable", "forward the object based on a predetermined criteria relating to the object, the predetermined criteria being selected from a group consisting of: [[including]] the time-to-live of the object and the object being marked as uncacheable", "forward the object based on a ~~predetermined criteria relating to the time-to-live of the object, including the time-to-live of the object and~~ or the object being marked as uncacheable" or a similar limitation that clearly indicates the criteria are independent criteria upon which the forwarding decision may be based.

17. If Applicant intends for the claims to require consideration of each criteria by the upstream server, but not require the forwarding decision actually be based upon each criteria, as it appears from the Reply Brief filed 8/20/2008 (p. 4-5), the Examiner recommends amending the claims to include a limitation such as "determine the time time-to-live of the object and whether the object is marked as uncacheable; forward the

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object based on the time-to-live of the object or the object being marked as uncacheable”.

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 35, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carneal et al. (US 6,282,542) in view of Netscape (“Persistent Client State HTTP Cookies”) further in view of Patel (US 2003/0051100).

20. With regard to claim 35, Carneal discloses a method of providing content to a client, comprising:

receiving a message from a client requesting content including a Hypertext Markup Language page (web pages being fetched conform with HTML (Col 1, Line 59-Col 2, Line 9) specifying an object (inline object) from a content server (Col 8, Lines 7-14);

transmitting the message to an upstream server configured to retrieve the object from the content server; and

receiving, from the upstream server, the object over a data network prior to the client transmitting another message requesting the object (Col 8, Lines 29-42).

However, Carneal fails to specifically disclose that the client request includes a cookie, including the cookie in the request to the content server, or receiving the content from the upstream server if it is marked as uncacheable.

Netscape teaches including cookies in requests for web pages, and teaches forwarding the cookies through proxies with client requests (Page 4, Lines 8-9). This allows clients behind proxies to send state information to servers and receive customized content in response to requests.

Patel discloses a similar system for determining the cacheability of objects requested via a network (Abstract). Patel teaches receiving a request for content at an upstream server (¶21) and obtaining the content from a content server (¶22).

Uncacheable content is marked non-cacheable and forwarded in response to the original request (¶22). This would have been an advantageous addition to the system disclosed by Patel, since it would have allowed the downstream devices to identify uncacheable content received from the content server, ensuring that the downstream devices do not cache the content locally.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to forward cookies contained in client responses through the proxy server to the content server so that the client may send state information to the content server and receive customized content in response and examine the

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retrieved objects to determine if they are cacheable to ensure that non-cacheable objects are not cached by downstream devices.

21. With regard to claim 36, Carneal further discloses receiving a list specifying expected objects corresponding to the content; and

blocking requests from the client for objects on the list from being transmitted to the upstream server (Col 8, Lines 40-48).

22. With regard to claim 38, Carneal further discloses explicitly tracking objects stored in a local cache; and

forwarding the message only if the object associated with the requested content is not stored in the local cache (Col 8, Lines 44-53).

### ***Conclusion***

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON STRANGE whose telephone number is (571)272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron Strange/  
Primary Examiner, Art Unit 2448

/N. Le/  
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2400